# WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Wednesday, April 14, 2004

| Hide? | Set Name | Query | Hit Count |
|---|---|---|---|
| | *DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ* | | |
| ☐ | L2 | L1 same (protein near2 deliver$2) | 21 |
| ☐ | L1 | zinc finger | 4159 |

END OF SEARCH HISTORY

# Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

**Search Results** - Record(s) 1 through 21 of 21 returned.

☐ 1. Document ID: US 20030211612 A1

L2: Entry 1 of 21 File: PGPB Nov 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030211612
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030211612 A1

TITLE: Establishment of cellular manipulations which enhance oligo-mediated gene targeting

PUBLICATION-DATE: November 13, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Seidman, Michael M. | Washington | DC | US | |
| Majumdar, Alokes | Gaithersburg | MD | US | |

US-CL-CURRENT: 435/455

ABSTRACT:

The invention relates to improved methods for the modification, including recombination, of genes in cells. More specifically, the invention relates to the increased efficiency of modification, including recombination, by introduction of a DNA-modifying molecule into a cell cycle synchronized cell. Additionally, the invention relates to target DNA that has been modified, mutated or marked by the approaches disclosed herein. The invention also relates to cells, tissue, and organisms which have been modified by the invention's methods.

L2: Entry 1 of 21 File: PGPB Nov 13, 2003

DOCUMENT-IDENTIFIER: US 20030211612 A1
TITLE: Establishment of cellular manipulations which enhance oligo-mediated gene targeting

Brief Description of Drawings Paragraph:
[0106] The present invention also relates to the optimization of DNA targeting events and the process of sequence modulation stimulated by the targeting event. In this regard, the use of triple helix forming oligonucleotides (TFOs) provides a useful illustration of the efficacy of this approach. However, successful protocols are not limited to the use of TFOs. In other embodiments, the targeting reagent is exemplified, but not limited to, peptide nucleic acids (PNAs), polyamide-polypyrroles, oligonucleotides designed for marker rescue, sequence specific zinc

finger proteins or reagents to induce modification and/or double-cross homologous recombination. Each of these additional embodiments are useful in provoking sequence modulation of a target as a consequence of target binding, or can be used to deliver DNA reactive reagents which then initiate the desired event pathway. Associated reagents include, but are not limited to, crosslinkers, alkylators, base modifiers, DNA breakers, free radical generators and other reagents suitable for use in the present invention. These reagents can be delivered to cells by a variety of delivery technologies, including, but not limited to, electroporation, liposomes, porphyrins, associated protein delivery reagents, passive uptake and any other suitable delivery means.



☐ 2. Document ID: US 20030194727 A1

L2: Entry 2 of 21 File: PGPB Oct 16, 2003

PGPUB-DOCUMENT-NUMBER: 20030194727
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030194727 A1

TITLE: Phenotypic screen of chimeric proteins

PUBLICATION-DATE: October 16, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Kim, Jin-Soo | Yuseong-gu | | KR | |
| Park, Kyung-Soon | Yuseong-gu | | KR | |
| Lee, Dong-Ki | Yuseong-gu | | KR | |
| Seol, Wongi | Yuseong-gu | | KR | |
| Lee, Horim | Chungcheongnam-do | | KR | |
| Lee, Seong-Il | Yuseong-gu | | KR | |
| Yang, Hyo-Young | Yuseong-gu | | KR | |
| Lee, Yangsoon | Yuseong-gu | | KR | |
| Jang, Young-Soon | Yuseong-gu | | KR | |

US-CL-CURRENT: 435/6; 435/219, 435/252.3, 435/254.2, 435/320.1, 435/325, 435/69.1, 435/7.2

ABSTRACT:

In one aspect, a library of nucleic acids that encode different artificial, chimeric proteins is screened to identify a chimeric protein that alters a phenotypic trait of a cell or organism. The chimeric protein can be identified without a priori knowledge of a particular target gene or pathway. Some chimeric proteins include multiple zinc finger domains and can induce, for example, thermotolerance, solvent-tolerance, altered cellular growth, insulin production, differentiation, and drug resistance.

L2: Entry 2 of 21 File: PGPB Oct 16, 2003

DOCUMENT-IDENTIFIER: US 20030194727 A1
TITLE: Phenotypic screen of chimeric proteins

Detail Description Paragraph:
[0541] Accordingly, 08_D04-p65, its derivatives, and similarly functional zinc finger proteins can be used as therapeutics for diabetes. DNA encoding 08_D04-p65 or a similarly functional zinc finger protein can be delivered into diabetic patients by viral delivery or in encapsulated form (e.g., a liposome). Once DNA is delivered into cells, the zinc finger protein can be expressed to induce the production of insulin. In some implementations, the nucleic acid encoding the zinc finger protein can be operably linked to an inducible promoter, e.g., a Tet-inducible promoter. The use of doxycycline as an inducer enables the level of insulin production to be regulated by a small chemical. Because insulin-inducing zinc finger proteins, such as 08_D04-p65, can function in different human cell lines, it may work in both pancreatic cells (e.g., beta cells and non-beta cells) and non-pancreatic cells.



☐ 3. Document ID: US 20030186841 A1

L2: Entry 3 of 21 File: PGPB Oct 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030186841
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030186841 A1

TITLE: Ligand activated transcriptional regulator proteins

PUBLICATION-DATE: October 2, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Barbas, Carlos F. III | Del Mar | CA | US | |
| Kadan, Michael Joseph | Adams Town | MD | US | |
| Beerli, Roger | San Diego | CA | US | |

US-CL-CURRENT: 514/1; 435/320.1, 435/325, 435/69.7, 514/44, 530/350, 536/23.5

ABSTRACT:

Fusion proteins for use as ligand-dependent transcriptional are provided. The fusion proteins include a nucleotide binding domain operatively linked to a ligand-binding domain. They also can include a transcription regulating domain. The nucleotide binding domain is a zinc-finger peptide that binds to a targeted contiguous nucleotide sequence of from 3 to about 18 nucleotides are provided. The fusion proteins are used for gene therapy. Also provided are polynucleotides encoding the fusion proteins, expression vectors, and transfected cells.

L2: Entry 3 of 21 File: PGPB Oct 2, 2003

DOCUMENT-IDENTIFIER: US 20030186841 A1

TITLE: Ligand activated transcriptional regulator proteins

Detail Description Paragraph:
[0263] Methods for gene therapy are provided. The fusion proteins are administered either as a protein or as a nucleic acid encoding the protein and delivered to cells or tissues in a mammal, such as a human. The fusion protein is targeted either to a specific sequence in the genome (an endogenous gene) or to an exogenously added gene, which is administerd as part of an expression cassette. Prior to, simultaneous with or subsequent to adminstration of the fusion protein, a ligand that specifically interacts with the LBD in the fusion protein is adminstered. In embodiments, in which the targeted gene is exogenous, the expression cassette, which can be present in a vector, is administered, simultaneous with or subsequent to adminstration of the fusion protein. These methods are intended for treatment of any genetic disease, for treatment of acquired disease and any other conditions. Diseases include, cell proliferative disorders, such as cancer. Such therapy achieves its therapeutic effect by introduction of the fusion protein that includes the zinc finger-nucleotide binding polypeptide, either as the fusion or protein or encoded by a nucleic acid molecule that is expressed in the cells, into cells of animals having the disorder. Delivery of the fusion protein or nucleic acid molecule can be effected by any method known to those of skill in the art, including methods described herein. For example, it can be effected using a recombinant expression vector such as a chimeric virus or a colloidal dispersion system.



☐ 4. Document ID: US 20030148968 A1

L2: Entry 4 of 21 File: PGPB Aug 7, 2003

PGPUB-DOCUMENT-NUMBER: 20030148968
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030148968 A1

TITLE: Techniques and compositions for treating cardiovascular disease by in vivo gene delivery

PUBLICATION-DATE: August 7, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Hammond, H. Kirk | La Jolla | CA | US | |
| Dillmann, Wolfgang | Solana Beach | CA | US | |
| Giordano, Frank J. | Madison | CT | US | |

US-CL-CURRENT: 514/44; 604/500

ABSTRACT:

Methods are provided for treating patients with cardiovascular disease, including heart disease and peripheral vascular disease. The preferred methods of the present invention involve in vivo delivery of genes, encoding angiogenic proteins or peptides, to the myocardium or to peripheral ischemic tissue, by introduction of a

vector containing the gene into a blood vessel supplying the heart or into a peripheral ischemic tissue.

L2: Entry 4 of 21 File: PGPB Aug 7, 2003

DOCUMENT-IDENTIFIER: US 20030148968 A1
TITLE: Techniques and compositions for treating cardiovascular disease by in vivo gene delivery

Detail Description Paragraph:
[0080] For details on the FGF family, see, e.g., Burgess, Ann. N.Y. Acad. Sci. 638: 89-97, 1991; Burgess et al. Annu. Rev. Biochem. 58: 575-606, 1989; Muhlhauser et al., Hum. Gene Ther. 6: 1457-1465, 1995; Zhan et al., Mol. Cell. Biol., 8: 3487, 1988; Seddon et al., Ann. N.Y. Acad. Sci. 638: 98-108, 1991. For human hst/KS3 (i.e. FGF-4), see Taira et al. Proc. Natl. Acad. Sci. USA 84: 2980-2984, 1987. For human VEGF-A protein, see e.g., Tischer et al. J. Biol. Chem. 206: 11947-11954, 1991, and references therein; Muhlhauser et al., Circ. Res. 77: 1077-1086, 1995; and Neufeld et al., WO 98/10071 (Mar. 12, 1998). Other variants of known angiogenic proteins have likewise been described; for example variants of VEGF proteins and VEGF related proteins, see e.g., Baird et al., WO 99/40197, (Aug. 12, 1999); and Bohlen et al., WO 98/49300, (Nov. 5, 1998). Combinations of angiogenic proteins and gene delivery vectors encoding such combinations are described in Gao et al. U.S. Ser. No. 09/607,766, filed Jun. 30, 2000, entitled "Dual Recombinant Gene Therapy Compositions and Methods of Use", hereby incorporated by reference in its entirety. As is also appreciated by those of skill in the art, angiogenic proteins can promote angiogenesis by enhancing the expression, stability or functionality of other angiogenic proteins. Examples of such angiogenic proteins or peptides include, e.g., regulatory factors that are induced in response to hypoxia (e.g. the hypoxia-inducible factors such as Hif-1, Hif-2 and the like; see, e.g., Wang et al., Proc. Natl. Acad. Sci. USA 90(9): 4304-8, 1993; Forsythe et al., Mol. Cell. Biol. 16(9): 4604-13, 1996; Semenza et al., Kidney Int., 51(2): 553-5, 1997; and O'Rourke et al., Oncol. Res., 9(6-7): 327-32, 1997; as well as other regulatory factors, such as, for example, those that are induced by physiological conditions associated with cardiovascular disease, such as inflammation (e.g., inducible nitric oxide synthase (iNOS), as well as the constitutive counterpart, CNOS; see e.g., Yoshizumi et al., Circ. Res., 73(1): 205-9, 1993; Chartrain et al., J. Biol. Chem., 269(9): 6765-72, 1994; Papapetropoulos et al., Am. J. Pathol., 150(5): 1835-44, 1997; and Palmer, et al., Am. J. Physiol., 274(2 Pt 1): L212-9, 1998). Additional examples of such angiogenic proteins include certain insulin-like growth factors (e.g., IGF-1) and angiopoietins (Angs), which have been reported to promote and/or stimulate expression and/or activity of other angiogenic proteins such as VEGF (see e.g. Goad, et al, Endocrinology, 137(6):2262-68 (1996); Warren, et al., J. Bio. Chem., 271(46):29483-88 (1996); Punglia, et al, Diabetes, 46(10):1619-26 (1997); and Asahara, et al., Circ. Res., 83(3):233-40 (1998) and Bermont et al. Int. J. Cancer 85: 117-123, 2000). Similarly, hepatocyte growth factor (also referred to as Scatter factor), which has been reported to induce blood vessel formation in vivo (see, e.g., Grant et al. Proc. Natl. Acad. Sci. USA 90: 1937-1941, 1993) has also been reported to increase expression of VEGF (see, e.g., Wojta et al., Lab Invest. 79:427-438, 1999). Additional examples of angiogenic polypeptides include natural and synthetic regulatory peptides (angiogenic polypeptide regulators) that act as promoters of endogenous angiogenic genes. Native angiogenic polypeptide regulators can be derived from inducers of endogenous angiogenic genes. Hif, as described above, is one illustrative example of such an angiogenic gene which has been reported to promote angiogenesis by inducing expression of other angiogenic genes. Synthetic angiogenic polypeptide regulators can be designed, for example, by preparing multi-finger zinc-binding proteins that specifically bind to sequences upstream of the coding regions of endogenous angiogenic genes and which can be used to induce the expression of such endogenous

genes. Studies of numerous genes has led to the development of "rules" for the design of such zinc-finger DNA binding proteins (see, e.g., Rhodes and Klug, Scientific American, February 1993, pp 56-65; Choo and Klug, Proc. Natl. Acad. Sci. USA, 91(23): 11163-7, 1994; Rebar and Pabo, Science, 263(5147): 671-3, 1994; Choo et al., J. Mol. Biol., 273(3): 525-32, 1997; Pomerantz et al., Science 267: 93-96, 1995; and Liu et al., Proc. Natl. Acad. Sci. USA, 94: 5525-5530, 1997. As will be appreciated by those of skill in the art, numerous additional genes encoding proteins or peptides having the capacity to directly or indirectly promote angiogenesis are regularly identified and new genes will be identified based on similarities to known angiogenic protein or peptide encoding genes or to the discovered capability of such genes to encode proteins or peptides that promote angiogenesis. Sequence information for such genes and encoded polypeptides is readily obtainable from sequence databases such as GenBank or EMBL. Polynucleotides encoding these proteins can also be obtained from gene libraries, e.g., by using PCR or hybridization techniques routine in the art.



☐ 5. Document ID: US 20030143559 A1

L2: Entry 5 of 21 File: PGPB Jul 31, 2003

PGPUB-DOCUMENT-NUMBER: 20030143559
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030143559 A1

TITLE: Novel estrogen receptor ligand binding domain variants and novel ligands and pharmaceutical compositions

PUBLICATION-DATE: July 31, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Bracken, Kathryn Rene | Morristown | NJ | US | |
| de los Angeles, Joseph Ernest | Cranford | NJ | US | |
| Huang, Ying | Olney | MD | US | |
| Kadan, Michael Joseph | Adamstown | MD | US | |
| Ksander, Gary Michael | Milford | NJ | US | |
| Zerby, Dennis Bryan | Myersville | MD | US | |

US-CL-CURRENT: 435/6; 435/320.1, 435/325, 435/69.1, 530/350, 536/23.5

ABSTRACT:

Mutants of steroid receptor ligand binding domains and synthetic ligands which have specific binding affinities for these receptors are provided. The use of these LBD-ligand combinations for construction of selective "molecular gene switches" is disclosed. Methods of regulating gene function using these switches are provided.

L2: Entry 5 of 21 File: PGPB Jul 31, 2003

DOCUMENT-IDENTIFIER: US 20030143559 A1

TITLE: Novel estrogen receptor ligand binding domain variants and novel ligands and pharmaceutical compositions

Detail Description Paragraph:
[0258] These methods are intended for treatment of any genetic disease, for treatment of acquired disease and any other conditions. Diseases include, cell proliferative disorders, such as cancer. Such therapy achieves its therapeutic effect by introduction of the fusion protein that includes the zinc finger-nucleotide binding polypeptide, either as the fusion or protein or encoded by a nucleic acid molecule that is expressed in the cells, into cells of animals having the disorder. Delivery of the fusion protein or nucleic acid molecule can be effected by any method known to those of skill in the art, including methods described herein. For example, it can be effected using a recombinant expression vector such as a chimeric virus or a colloidal dispersion system.



☐ 6. Document ID: US 20030134318 A1

L2: Entry 6 of 21 File: PGPB Jul 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030134318
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030134318 A1

TITLE: Methods of using randomized libraries of zinc finger proteins for the identification of gene function

PUBLICATION-DATE: July 17, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Case, Casey C. | San Mateo | CA | US | |
| Liu, Qiang | Foster City | CA | US | |
| Rebar, Edward J. | El Cerrito | CA | US | |
| Wolffe, Alan P. | Orinda | CA | US | |

US-CL-CURRENT: 435/6; 435/7.1

ABSTRACT:

The present invention relates to methods of using libraries of randomized zinc finger proteins to identify genes associated with selected phenotypes.

L2: Entry 6 of 21 File: PGPB Jul 17, 2003

DOCUMENT-IDENTIFIER: US 20030134318 A1
TITLE: Methods of using randomized libraries of zinc finger proteins for the identification of gene function

Detail Description Paragraph:

[0049] "Administering" an expression vector, nucleic acid, zinc finger protein, or a delivery vehicle to a cell comprises transducing, transfecting, electroporating, translocating, fusing, phagocytosing, or ballistic methods, etc., i.e., any means by which a protein or nucleic acid can be transported across a cell membrane and preferably into the nucleus of a cell, including administration of naked DNA.



☐ 7. Document ID: US 20030087817 A1

L2: Entry 7 of 21 File: PGPB May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087817
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030087817 A1

TITLE: Regulation of endogenous gene expression in cells using zinc finger proteins

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Cox, George Norbert III | Louisville | CO | US | |
| Case, Casey Christopher | San Mateo | CA | US | |
| Eisenberg, Stephen P. | Boulder | CO | US | |
| Jarvis, Eric Edward | Boulder | CO | US | |
| Spratt, Sharon Kaye | Vacaville | CA | US | |

US-CL-CURRENT: 514/12; 435/455

ABSTRACT:

The present invention provides methods for modulating expression of endogenous cellular genes using recombinant zinc finger proteins.

L2: Entry 7 of 21 File: PGPB May 8, 2003

DOCUMENT-IDENTIFIER: US 20030087817 A1
TITLE: Regulation of endogenous gene expression in cells using zinc finger proteins

Summary of Invention Paragraph:
[0032] In one embodiment, the method further comprises the step of first administering to the cell a delivery vehicle comprising the zinc finger protein, wherein the delivery vehicle comprises a liposome or a membrane translocation polypeptide.

CLAIMS:

18. The method of claim 1, wherein the method further comprises the step of first administering to the cell a delivery vehicle comprising the zinc finger protein, wherein the delivery vehicle comprises a liposome or a membrane translocation polypeptide.

48. The method of claim 31, wherein the method further comprises the step of first administering to the cell a delivery vehicle comprising the zinc finger protein, wherein the delivery vehicle comprises a liposome or a membrane translocation polypeptide.

76. The method of claim 61, wherein the method further comprises the step of first administering to the cell a delivery vehicle comprising the zinc finger protein, wherein the delivery vehicle comprises a liposome or a membrane translocation polypeptide.



☐ 8. Document ID: US 20030044404 A1

L2: Entry 8 of 21 File: PGPB Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030044404
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030044404 A1

TITLE: Regulation of angiogenesis with zinc finger proteins

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Rebar, Edward | El Cerrito | CA | US | |
| Jamieson, Andrew | San Francisco | CA | US | |
| Liu, Qiang | Foster City | CA | US | |
| Liu, Pei-Qi | Richmond | CA | US | |
| Wolffe, Alan | Orinda | CA | US | |
| Eisenberg, Stephen P. | Boulder | CO | US | |
| Jarvis, Eric | Boulder | CO | US | |

US-CL-CURRENT: 424/94.63; 435/226, 435/320.1, 435/325, 435/69.1, 536/23.2

ABSTRACT:

Provided herein are a variety of methods and compositions for regulating angiogenesis, such methods and compositions being useful in a variety of applications where modulation of vascular formation is useful, including, but not limited to, treatments for ischemia and wound healing. Certain of the methods and compositions accomplish this by using various zinc finger proteins that bind to particular target sites in one or more VEGF genes. Nucleic acids encoding the zinc finger proteins are also disclosed. Methods for modulating the expression of one or more VEGF genes with the zinc finger proteins and nucleic acids are also disclosed. Such methods can also be utilized in a variety of therapeutic applications that involve the regulation of endothelial cell growth. Pharmaceutical compositions including the zinc finger proteins or nucleic acids encoding them are also provided.

L2: Entry 8 of 21 File: PGPB Mar 6, 2003

DOCUMENT-IDENTIFIER: US 20030044404 A1
TITLE: Regulation of angiogenesis with zinc finger proteins

CLAIMS:

35. The method according to claim 34, wherein the method further comprises administering the zinc finger protein in combination with a delivery vehicle.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 9. Document ID: US 20030037355 A1

L2: Entry 9 of 21 File: PGPB Feb 20, 2003

PGPUB-DOCUMENT-NUMBER: 20030037355
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030037355 A1

TITLE: Methods and compositions to modulate expression in plants

PUBLICATION-DATE: February 20, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Barbas, Carlos F. III | Solana Beach | CA | US | |
| Stege, Justin T. | San Diego | CA | US | |
| Guan, Xueni | San Diego | CA | US | |
| Dalmia, Bipin | San Diego | CA | US | |

US-CL-CURRENT: 800/278; 435/320.1, 435/4, 435/419, 435/471, 530/350, 530/387.1, 536/23.6, 800/284, 800/287, 800/288, 800/298

ABSTRACT:

The invention relates to the field of plant and agricultural technology. More specifically, the invention relates to the use of zinc finger proteins and fusions of said proteins to regulate gene expression and metabolic pathways in plants.

L2: Entry 9 of 21 File: PGPB Feb 20, 2003

DOCUMENT-IDENTIFIER: US 20030037355 A1
TITLE: Methods and compositions to modulate expression in plants

Detail Description Paragraph:
[0077] As used herein, "providing plant cells with a zinc finger protein" refers to

the provisional to the plant cells, whether in culture or in whole plant, functional zinc finger protein that is capable of modulating a target gene in the plant cells. The functional zinc finger protein can be provided, i.e., delivered, to the plant cells by any means. For example, the zinc finger protein can be delivered directly into the plant cells. Alternatively and preferably, nucleic acids, e.g., DNA or mRNA, encoding such zinc finger protein can be delivered into the plant cells and the plant cells are maintained under the conditions that functional zinc finger protein can be produced within the plant cells.



☐ 10. Document ID: US 20030021776 A1

L2: Entry 10 of 21 File: PGPB Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030021776
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030021776 A1

TITLE: Regulation of angiogenesis with zinc finger proteins

PUBLICATION-DATE: January 30, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Rebar, Edward | El Cerrito | CA | US | |
| Jamieson, Andrew | San Francisco | CA | US | |
| Liu, Qiang | Foster City | CA | US | |
| Liu, Pei-Qi | Richmond | CA | US | |
| Wolffe, Alan | Orinda | CA | US | |
| Eisenberg, Stephen P. | Boulder | CO | US | |
| Jarvis, Eric | Boulder | CO | US | |

US-CL-CURRENT: 424/94.63; 435/226, 514/6

ABSTRACT:

Provided herein are a variety of methods and compositions for regulating angiogenesis, such methods and compositions being useful in a variety of applications where modulation of vascular formation is useful, including, but not limited to, treatments for ischemia and wound healing. Certain of the methods and compositions accomplish this by using various zinc finger proteins that bind to particular target sites in one or more VEGF genes. Nucleic acids encoding the zinc finger proteins are also disclosed. Methods for modulating the expression of one or more VEGF genes with the zinc finger proteins and nucleic acids are also disclosed. Such methods can also be utilized in a variety of therapeutic applications that involve the regulation of endothelial cell growth. Pharmaceutical compositions including the zinc finger proteins or nucleic acids encoding them are also provided.

L2: Entry 10 of 21 File: PGPB Jan 30, 2003

DOCUMENT-IDENTIFIER: US 20030021776 A1
TITLE: Regulation of angiogenesis with zinc finger proteins

CLAIMS:

35. The method according to claim 34, wherein the method further comprises administering the zinc finger protein in combination with a delivery vehicle.



☐ 11. Document ID: US 20020164575 A1

L2: Entry 11 of 21 File: PGPB Nov 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020164575
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020164575 A1

TITLE: Gene identification

PUBLICATION-DATE: November 7, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Case, Casey C. | San Mateo | CA | US | |
| Urnov, Fyodor | Richmond | CA | US | |

US-CL-CURRENT: 435/4; 435/6

ABSTRACT:

The present disclosure provides methods and compositions for identifying a particular genomic sequence as a gene and/or a coding region, once that sequence has been tentatively identified as a gene based on genomic analysis using one or more gene prediction algorithms. The methods include the use of exogenous molecules such as zinc finger proteins which are capable of binding to and modulating expression of gene transcription, targeted to putative gene sequences, followed by assay for one or more selected phenotypes.

L2: Entry 11 of 21 File: PGPB Nov 7, 2002

DOCUMENT-IDENTIFIER: US 20020164575 A1
TITLE: Gene identification

Detail Description Paragraph:
[0079] "Administering" an expression vector, nucleic acid, zinc finger protein, or a delivery vehicle to a cell comprises transducing, transfecting, electroporating, translocating, fusing, phagocytosing, or biolistic methods, etc., i.e., any means by which a protein or nucleic acid can be transported across a cell membrane and preferably into the nucleus of a cell, including administration of naked DNA.

Detail Description Paragraph:
[0234] Transgenic and non-transgenic animals are also used as an embodiment for examining regulation of candidate gene expression in vivo. Transgenic animals typically express the zinc finger protein of choice. Alternatively, animals that transiently express the zinc finger protein of choice, or to which the zinc finger protein has been administered in a delivery vehicle, can be used. Regulation of candidate gene expression is tested using any one of the assays described herein. Animals can be observed and assayed for functional changes, e.g., challenged with drugs, mitogens, viruses, pathogens, toxins, and the like.



☐ 12. Document ID: US 20020160940 A1

L2: Entry 12 of 21 File: PGPB Oct 31, 2002

PGPUB-DOCUMENT-NUMBER: 20020160940
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020160940 A1

TITLE: Modulation of endogenous gene expression in cells

PUBLICATION-DATE: October 31, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Case, Casey C. | San Mateo | CA | US | |
| Wolffe, Alan | Richmond | CA | US | |
| Urnov, Fyodor | Richmond | CA | US | |
| Lai, Albert | Richmond | CA | US | |
| Snowden, Andrew | Alameda | CA | US | |
| Tan, Siyuan | El Cerrito | CA | US | |
| Gregory, Philip | | | US | |

US-CL-CURRENT: 514/6; 435/455

ABSTRACT:

Disclosed herein are methods and compositions for modulating expression of endogenous cellular genes using recombinant zinc finger proteins.

L2: Entry 12 of 21 File: PGPB Oct 31, 2002

DOCUMENT-IDENTIFIER: US 20020160940 A1
TITLE: Modulation of endogenous gene expression in cells

Summary of Invention Paragraph:
[0023] In certain embodiments, the methods described herein further comprise the step of first administering to the cell a delivery vehicle comprising the zinc finger protein, wherein the delivery vehicle comprises a liposome or a membrane

translocation polypeptide.

Summary of Invention Paragraph:
[0024] In still further embodiments, the zinc finger proteins are delivered to the cell as nucleic acid molecules encoding the designed or selected zinc finger protein. Thus, in certain embodiments, the first and/or zinc finger proteins are encoded by a zinc finger protein nucleic acid operably linked to a promoter, and the method further comprises the step of first administering the nucleic acid to the cell in a lipid:nucleic acid complex or as naked nucleic acid. In other embodiments, wherein the zinc finger protein(s) is(are) encoded by an expression vector (e.g., a viral expression vector, a retroviral expression vector, an adenoviral expression vector, or an AAV expression vector) comprising a zinc finger protein nucleic acid operably linked to a promoter, and the method further comprises the step of first administering the expression vector to the cell. In any of the methods described herein, the promoter operably linked to the zinc finger protein-encoding nucleic acid can be inducible.

CLAIMS:

24. The method of claim 1, wherein the method further comprises the step of first administering to the cell a delivery vehicle comprising the zinc finger protein, wherein the delivery vehicle comprises a liposome or a membrane translocation polypeptide.



☐ 13. Document ID: US 20020146691 A1

L2: Entry 13 of 21 File: PGPB Oct 10, 2002

PGPUB-DOCUMENT-NUMBER: 20020146691
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020146691 A1

TITLE: Methods of using randomized libraries of zinc finger proteins for the identification of gene function

PUBLICATION-DATE: October 10, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Case, Casey C. | San Mateo | CA | US | |
| Liu, Qiang | Foster City | CA | US | |
| Rebar, Edward J. | El Cerrito | CA | US | |
| Wolffe, Alan P. | Orinda | CA | US | |

US-CL-CURRENT: 435/6; 435/4, 435/455

ABSTRACT:

The present invention relates to methods of using libraries of randomized zinc finger proteins to identify genes associated with selected phenotypes.

L2: Entry 13 of 21 File: PGPB Oct 10, 2002

DOCUMENT-IDENTIFIER: US 20020146691 A1
TITLE: Methods of using randomized libraries of zinc finger proteins for the identification of gene function

Detail Description Paragraph:
[0049] "Administering" an expression vector, nucleic acid, zinc finger protein, or a delivery vehicle to a cell comprises transducing, transfecting, electroporating, translocating, fusing, phagocytosing, or ballistic methods, etc., i.e., any means by which a protein or nucleic acid can be transported across a cell membrane and preferably into the nucleus of a cell, including administration of naked DNA.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 14. Document ID: US 20020094529 A1

L2: Entry 14 of 21 File: PGPB Jul 18, 2002

PGPUB-DOCUMENT-NUMBER: 20020094529
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020094529 A1

TITLE: Gene identification

PUBLICATION-DATE: July 18, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Case, Casey C. | San Mateo | CA | US | |
| Urnov, Fyodor | Richmond | CA | US | |

US-CL-CURRENT: 435/6; 435/4, 435/455

ABSTRACT:

The present disclosure provides methods and compositions for identifying a particular genomic sequence as a gene and/or a coding region, once that sequence has been tentatively identified as a gene based on genomic analysis using one or more gene prediction algorithms. The methods include the use of exogenous molecules such as zinc finger proteins which are capable of binding to and modulating expression of gene transcription, targeted to putative gene sequences, followed by assay for one or more selected phenotypes.

L2: Entry 14 of 21 File: PGPB Jul 18, 2002

DOCUMENT-IDENTIFIER: US 20020094529 A1
TITLE: Gene identification

Detail Description Paragraph:

[0081] "Administering" an expression vector, nucleic acid, zinc finger protein, or a delivery vehicle to a cell comprises transducing, transfecting, electroporating, translocating, fusing, phagocytosing, or biolistic methods, etc., i.e., any means by which a protein or nucleic acid can be transported across a cell membrane and preferably into the nucleus of a cell, including administration of naked DNA.

Detail Description Paragraph:
[0236] Transgenic and non-transgenic animals are also used as an embodiment for examining regulation of candidate gene expression in vivo. Transgenic animals typically express the zinc finger protein of choice. Alternatively, animals that transiently express the zinc finger protein of choice, or to which the zinc finger protein has been administered in a delivery vehicle, can be used. Regulation of candidate gene expression is tested using any one of the assays described herein. Animals can be observed and assayed for functional changes, e.g., challenged with drugs, mitogens, viruses, pathogens, toxins, and the like.



☐ 15. Document ID: US 20020081614 A1

L2: Entry 15 of 21 File: PGPB Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020081614
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020081614 A1

TITLE: Functional genomics using zinc finger proteins

PUBLICATION-DATE: June 27, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Case, Casey C. | San Mateo | CA | US | |
| Zhang, Lei | San Francisco | CA | US | |

US-CL-CURRENT: 435/6; 435/7.21, 702/19

ABSTRACT:

0 The present invention provides methods of regulating gene expression using recombinant zinc finger proteins, for functional genomics and target validation applications.

L2: Entry 15 of 21 File: PGPB Jun 27, 2002

DOCUMENT-IDENTIFIER: US 20020081614 A1
TITLE: Functional genomics using zinc finger proteins

Detail Description Paragraph:
[0065] "Administering" an expression vector, nucleic acid, zinc finger protein, or a delivery vehicle to a cell comprises transducing, transfecting, electroporating, translocating, fusing, phagocytosing, or biolistic methods, etc., i.e., any means by which a protein or nucleic acid can be transported across a cell membrane and

preferably into the nucleus of a cell, including administration of naked DNA.

Detail Description Paragraph:
[0191] Transgenic and non-transgenic animals are also used as an embodiment for examining regulation of candidate gene expression in vivo. Transgenic animals typically express the zinc finger protein of choice. Alternatively, animals that transiently express the zinc finger protein of choice, or to which the zinc finger protein has been administered in a delivery vehicle, can be used. Regulation of candidate gene expression is tested using any one of the assays described herein. Animals can be observed and assayed for functional changes, e.g., challenged with drugs, mitogens, viruses, pathogens, toxins, and the like.



☐ 16. Document ID: US 6607882 B1

L2: Entry 16 of 21 File: USPT Aug 19, 2003

US-PAT-NO: 6607882
DOCUMENT-IDENTIFIER: US 6607882 B1

TITLE: Regulation of endogenous gene expression in cells using zinc finger proteins

DATE-ISSUED: August 19, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Cox, III; George N. | Louisville | CO | | |
| Case; Casey C. | San Mateo | CA | | |
| Eisenberg; Stephen P. | Boulder | CO | | |
| Jarvis; Eric E. | Boulder | CO | | |
| Spratt; Sharon K. | Vacaville | CA | | |

US-CL-CURRENT: 435/6; 435/320.1, 435/455, 435/468, 536/23.1, 536/23.4, 536/24.1

ABSTRACT:

The present invention provides methods for modulating expression of endogenous cellular genes using recombinant zinc finger proteins.

32 Claims, 16 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 11

L2: Entry 16 of 21 File: USPT Aug 19, 2003

DOCUMENT-IDENTIFIER: US 6607882 B1
TITLE: Regulation of endogenous gene expression in cells using zinc finger proteins

Brief Summary Text (34):
In one embodiment, the method further comprises the step of first administering to the cell a delivery vehicle comprising the zinc finger protein, wherein the

delivery vehicle comprises a liposome or a membrane translocation polypeptide.



☐ 17. Document ID: US 6599692 B1

L2: Entry 17 of 21 File: USPT Jul 29, 2003

US-PAT-NO: 6599692
DOCUMENT-IDENTIFIER: US 6599692 B1

TITLE: Functional genomics using zinc finger proteins

DATE-ISSUED: July 29, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Case; Casey C. | San Mateo | CA | | |
| Zhang; Lei | San Francisco | CA | | |

US-CL-CURRENT: 435/4; 435/6, 536/23.1

ABSTRACT:

The present invention provides methods of regulating gene expression using recombinant zinc finger proteins, for functional genomics and target validation applications.

55 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

L2: Entry 17 of 21 File: USPT Jul 29, 2003

DOCUMENT-IDENTIFIER: US 6599692 B1
TITLE: Functional genomics using zinc finger proteins

Detailed Description Text (30):
"Administering" an expression vector, nucleic acid, zinc finger protein, or a delivery vehicle to a cell comprises transducing, transfecting, electroporating, tanslocating, fusing, phagocytosing, or biolistic methods, etc., i.e., any means by which a protein or nucleic acid can be transported across a cell membrane and preferably into the nucleus of a cell, including administration of naked DNA.

Detailed Description Text (146):
Transgenic and non-transgenic animals are also used as an embodiment for examining regulation of candidate gene expression in vivo. Transgenic animals typically express the zinc finger protein of choice. Alternatively, animals that transiently express the zinc finger protein of choice, or to which the zinc finger protein has been administered in a delivery vehicle, can be used. Regulation of candidate gene expression is tested using any one of the assays described herein. Animals can be observed and assayed for functional changes, e.g., challenged with drugs, mitogens, viruses, pathogens, toxins, and the like.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw D

☐ 18. Document ID: US 6534261 B1

L2: Entry 18 of 21 File: USPT Mar 18, 2003

US-PAT-NO: 6534261
DOCUMENT-IDENTIFIER: US 6534261 B1

TITLE: Regulation of endogenous gene expression in cells using zinc finger proteins

DATE-ISSUED: March 18, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Cox, III; George Norbert | Louisville | CO | | |
| Case; Casey Christopher | San Mateo | CA | | |
| Eisenberg; Stephen P. | Boulder | CO | | |
| Jarvis; Eric Edward | Boulder | CO | | |
| Spratt; Sharon Kaye | Vacaville | CA | | |

US-CL-CURRENT: 435/6; 435/29, 536/23.5, 536/24.1

ABSTRACT:

The present invention provides methods for modulating expression of endogenous cellular genes using recombinant zinc finger proteins.

85 Claims, 14 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 8

L2: Entry 18 of 21 File: USPT Mar 18, 2003

DOCUMENT-IDENTIFIER: US 6534261 B1
TITLE: Regulation of endogenous gene expression in cells using zinc finger proteins

Brief Summary Text (32):
In one embodiment, the method further comprises the step of first administering to the cell a delivery vehicle comprising the zinc finger protein, wherein the delivery vehicle comprises a liposome or a membrane translocation polypeptide.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw D

☐ 19. Document ID: US 6503717 B2

L2: Entry 19 of 21 File: USPT Jan 7, 2003

US-PAT-NO: 6503717
DOCUMENT-IDENTIFIER: US 6503717 B2

TITLE: Methods of using randomized libraries of zinc finger proteins for the identification of gene function

DATE-ISSUED: January 7, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Case; Casey C. | San Mateo | CA | | |
| Liu; Qiang | Foster City | CA | | |
| Rebar; Edward J. | El Cerrito | CA | | |
| Wolffe; Alan P. | Orinda | CA | | |

US-CL-CURRENT: 435/6; 435/320.1, 435/455, 536/23.5

ABSTRACT:

The present invention relates to methods of using libraries of randomized zinc finger proteins to identify genes associated with selected phenotypes.

30 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

L2: Entry 19 of 21 File: USPT Jan 7, 2003

DOCUMENT-IDENTIFIER: US 6503717 B2
TITLE: Methods of using randomized libraries of zinc finger proteins for the identification of gene function

Detailed Description Text (17):
"Administering" an expression vector, nucleic acid, zinc finger protein, or a delivery vehicle to a cell comprises transducing, transfecting, electroporating, translocating, fusing, phagocytosing, or ballistic methods, etc., i.e., any means by which a protein or nucleic acid can be transported across a cell membrane and preferably into the nucleus of a cell, including administration of naked DNA.



☐ 20. Document ID: US 6013453 A

L2: Entry 20 of 21 File: USPT Jan 11, 2000

US-PAT-NO: 6013453
DOCUMENT-IDENTIFIER: US 6013453 A
** See image for Certificate of Correction **

TITLE: Binding proteins for recognition of DNA

DATE-ISSUED: January 11, 2000

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Choo; Yen | Singapore | | | SG |
| Klug; Aaron | Cambridge | | | GB |
| Sanchez Garcia; Isidro | Salamanca | | | ES |

US-CL-CURRENT: 435/6; 536/23.4

ABSTRACT:

Disclosed are libraries of DNA sequences encoding zinc finger binding motifs for display on a particle, together with methods of designing zinc finger binding polypeptides for binding to a particular target sequence and, inter alia, use of designed zinc finger polypeptides for various in vitro or in vivo applications.

26 Claims, 22 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 14

L2: Entry 20 of 21 File: USPT Jan 11, 2000

DOCUMENT-IDENTIFIER: US 6013453 A
**** See image for Certificate of Correction ****
TITLE: Binding proteins for recognition of DNA

Brief Summary Text (47):
The zinc finger polypeptide may be synthesised in situ in the cell as a result of delivery to the cell of DNA directing expression of the polypeptide. Methods of facilitating delivery of DNA are well-known to those skilled in the art and include, for example, recombinant viral vectors (e.g. retroviruses, adenoviruses), liposomes and the like. Alternatively, the zinc finger polypeptide could be made outside the cell and then delivered thereto. Delivery could be facilitated by incorporating the polypeptide into liposomes etc. or by attaching the polypeptide to a targetting moiety (such as the binding portion of an antibody or hormone molecule). Indeed, one significant advantage of zinc finger proteins over oligonucleotides or protein-nucleic acids (PNAs) in controlling gene expression, would be the vector-free delivery of protein to target cells. Unlike the above, many examples of soluble proteins entering cells are known, including antibodies to cell surface receptors. The present inventors are currently carrying out fusions of anti-bcr-abl fingers (see example 3 below) to a single-chain (sc) Fv fragment capable of recognising NIP (4-hydroxy-5-iodo-3-nitrophenyl acetyl). Mouse transferrin conjugated with NIP will be used to deliver the fingers to mouse cells via the mouse transferrin receptor.



☐ 21. Document ID: US 6007988 A

L2: Entry 21 of 21 File: USPT Dec 28, 1999

US-PAT-NO: 6007988

DOCUMENT-IDENTIFIER: US 6007988 A

TITLE: Binding proteins for recognition of DNA

DATE-ISSUED: December 28, 1999

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---|---|---|---|---|
| Choo; Yen | Singapore | | | SG |
| Klug; Aaron | Cambridge | | | GB |
| Sanchez Garcia; Isidro | Salamanca | | | ES |

US-CL-CURRENT: 435/6; 536/23.4

ABSTRACT:

Disclosed are libraries of DNA sequences encoding zinc finger binding motifs for display on a particle, together with methods of designing zinc finger binding polypeptides for binding to a particular target sequence and, inter alia, use of designed zinc finger polypeptides for various in vitro or in vivo applications.

41 Claims, 23 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 14

L2: Entry 21 of 21 File: USPT Dec 28, 1999

DOCUMENT-IDENTIFIER: US 6007988 A
TITLE: Binding proteins for recognition of DNA

Brief Summary Text (46):
The zinc finger polypeptide may be synthesised in situ in the cell as a result of delivery to the cell of DNA directing expression of the polypeptide. Methods of facilitating delivery of DNA are well-known to those skilled in the art and include, for example, recombinant viral vectors (e.g. retroviruses, adenoviruses), liposomes and the like. Alternatively, the zinc finger polypeptide could be made outside the cell and then delivered thereto. Delivery could be facilitated by incorporating the polypeptide into liposomes etc. or by attaching the polypeptide to a targetting moiety (such as the binding portion of an antibody or hormone molecule). Indeed, one significant advantage of zinc finger proteins over oligonucleotides or protein-nucleic acids (PNAs) in controlling gene expression, would be the vector-free delivery of protein to target cells. Unlike the above, many examples of soluble proteins entering cells are known, including antibodies to cell surface receptors. The present inventors are currently carrying out fusions of anti-bcr-abl fingers (see example 3 below) to a single-chain (sc) Fv fragment capable of recognising NIP (4-hydroxy-5-iodo-3-nitrophenyl acetyl). Mouse transferrin conjugated with NIP will be used to deliver the fingers to mouse cells via the mouse transferrin receptor.

| Term | Documents |
|---|---|
| PROTEIN | 322760 |
| PROTEINS | 203457 |
| DELIVER$2 | 0 |
| DELIVER | 293317 |
| DELIVERA | 2 |
| DELIVERAB | 1 |
| DELIVERAD | 1 |
| DELIVERAN | 1 |
| DELIVERAY | 1 |
| DELIVERBY | 4 |
| DELIVERCD | 1 |
| (L1 SAME (PROTEIN NEAR2 DELIVER$2)).PGPB,USPT,EPAB,JPAB,DWPI. | 21 |

There are more results than shown above. Click here to view the entire set.

**Display Format:** REV,KW Change Format

Previous Page Next Page Go to Doc#